AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-40. (CANCELED)

41. (Currently amended) A recombinant, <u>non-replicative</u>, <u>non-infectious</u>, lentirviral transfer vector, comprising:

non-infectious lentiviral nucleic acids, wherein the vector is deprived of functional genes encoding lentiviral Gag, Pol, and Env proteins;

a polynucleotide comprising a <u>lentiviral</u>, cis-acting central initiation region, which is the central polypurine tract ("cPPT"), and a <u>lentiviral</u>, cis-acting termination region, which is the central terminator sequence ("CTS"), wherein the cPPT and CTS are <u>for</u> <u>formation of a DNA triplex</u>, and wherein the cPPT and CTS are of the central polypurine tract ("cPPT") retroviral-like origin and derived from a retrotransposon and which form a triple-stranded sequence (DNA triplex);

a defined nucleotide sequence (transgene or sequence of interest); and regulatory signals for reverse transcription, expression, and packaging, wherein said regulatory signals are of retroviral or retroviral-like origin;

and wherein said transfer vector the DNA triplex transfers the defined nucleotide sequence into the nucleus of a cell.

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- 42. (Previously Presented) A recombinant vector according to claim 41, wherein the transgene or the sequence of interest is contained in an expression cassette comprising regulatory signals for transcription and expression.
- 43. (Previously Presented) A recombinant vector according to claim 41, wherein the regulatory signals for reverse transcription, expression, and packaging, and the polynucleotide comprising the cPPT and CTS regions are derived from an HIV-type retrovirus.
- 44. (Currently Amended) A recombinant vector according to claim 41, wherein the <u>lentirviral nucleic acids are HIV-1</u> or HIV-2 <u>nucleic acids</u>, and the regulatory <u>signals consist of HIV-1 or HIV-2 nucleic acids</u>.
- 45. (Previously Presented) A recombinant vector according to claim 41, wherein the polynucleotide is a DNA sequence comprising the cis-acting central initiation region (cPPT) and the termination region (CTS) of an HIV-1 retroviral genome.
- 46. (Previously Presented) A recombinant vector according to claim 41, wherein the polynucleotide comprises the cPPT and CTS regions of a sequence selected from SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 13, SEQ ID NO: 14, SEQ ID NO: 15, SEQ ID NO: 16, SEQ ID NO: 17, SEQ ID NO: 18, SEQ ID NO: 19, SEQ ID NO: 20, SEQ ID NO: 21, and SEQ ID NO: 33, or one of

these sequences mutated by deletion or insertion of one or more nucleotides, provided that the polynucleotide permits the formation of a triplex on reverse transcription of the vector under the control of suitable regulatory elements.

47-49. (Cancelled)

- 50. (Previously Presented) A recombinant vector according to claim 41, wherein the regulatory signals for reverse transcription, expression and packaging, and the polynucleotide comprising the cPPT and CTS regions are derived from a yeast retrotransposon.
- 51. (Previously Presented) A recombinant cell comprising a vector according to claim 41.

52-61. (Cancelled)

- 62. (New) A non-infectious particle comprising the vector of any one of claims 41 to 46 or 50 to 51 in a protein envelope.
- 63. (New) A non-infectious particle according to claim 62, wherein Gag, Pol, and Env proteins from an HIV retrovirus are provided by one or more additional vector(s).

- 64. (New) A non-infectious particle according to claim 63, wherein the HIV retrovirus is HIV-1 or HIV-2.
- 65. (New) A non-infectious particle according to claim 64, wherein Gag and Pol proteins from an HIV retrovirus are provided by one or more additional vector(s), and Env proteins from a different HIV retrovirus or from a virus is provided by an additional vector.
- 66. (New) A recombinant, non-replicative, non-infectious, lentirviral transfer vector, comprising:

non-infectious lentiviral nucleic acids, wherein the vector is deprived of functional genes encoding lentiviral Gag, Pol, and Env proteins;

a polynucleotide comprising a lentiviral, cis-acting central initiation region, which is the central polypurine tract ("cPPT"), and a lentiviral, cis-acting termination region, which is the central terminator sequence ("CTS"), wherein the cPPT and CTS are for formation of a DNA triplex;

a defined nucleotide sequence (transgene or sequence of interest); and regulatory signals for reverse transcription, expression, and packaging, wherein said regulatory signals are of retroviral or retroviral-like origin;

and wherein the DNA triplex transfers the defined nucleotide sequence into the nucleus of a cell.

- 67. (New) A recombinant vector according to claim 66, wherein the transgene or the sequence of interest is contained in an expression cassette comprising regulatory signals for transcription and expression.
- 68. (New) A recombinant vector according to claim 66, wherein the regulatory signals for reverse transcription, expression, and packaging, and the polynucleotide comprising the cPPT and CTS regions are derived from an HIV-type retrovirus.
- 69. (New) A recombinant vector according to claim 68, wherein the lentirviral nucleic acids are HIV-1 or HIV-2 nucleic acids, and the regulatory signals consist of HIV-1 or HIV-2 nucleic acids.
- 70. (New) A recombinant vector according to claim 66, wherein the polynucleotide is a DNA sequence comprising the cis-acting central initiation region (cPPT) and the termination region (CTS) of an HIV-1 retroviral genome.
- 71. (New) A recombinant vector according to claim 66, wherein the polynucleotide comprises the cPPT and CTS regions of a sequence selected from SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 13, SEQ ID NO: 14, SEQ ID NO: 15, SEQ ID NO: 16, SEQ ID NO: 17, SEQ ID NO: 18, SEQ ID NO: 19, SEQ ID NO: 20, SEQ ID NO: 21, and SEQ ID NO: 33, or one of these sequences mutated by deletion or insertion of one or more nucleotides, provided that the

polynucleotide permits the formation of a triplex on reverse transcription of the vector under the control of suitable regulatory elements.

- 72. (New) A recombinant vector according to claim 66, wherein the regulatory signals for reverse transcription, expression and packaging, and the polynucleotide comprising the cPPT and CTS regions are derived from a yeast retrotransposon.
 - 73. (New) A recombinant cell comprising a vector according to claim 66.
- 74. (New) A non-infectious particle comprising the vector of any one of claims 66 to 71 or 75 to 76 in a protein envelope.
- 75. (New) A non-infectious particle according to claim 74, wherein Gag, Pol, and Env proteins from an HIV retrovirus are provided by one or more additional vector(s).
- 76. (New) A non-infectious particle according to claim 75, wherein the HIV retrovirus is HIV-1 or HIV-2.
- 77. (New) A non-infectious particle according to claim 76, wherein Gag and Pol proteins from an HIV retrovirus are provided by one or more additional vector(s),

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and Env proteins from a different HIV retrovirus or from a virus is provided by an additional vector.